State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-63 Relating to Certification of New Heavy-Duty Motor Vehicle Engines

CATERPILLAR, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That the following Caterpillar, Inc. 1993 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Fuel Type: Diesel

Engine Family		lacement (Cubic Inches)	Exhaust Emission Control Systems and Special Features
PCT0403FZC9	6 .6	(403)	Turbocharger Smoke Puff Limiter Charge Air Cooler

Engine models and codes are listed on attachments.

The following are the certification emission standards for this engine family in grams per brake-horsepower-hour:

Hydrocarbons	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.25

The following are the certification emission values for this engine family in grams per brake-horsepower-hour:

Engine		Carbon	Nitrogen	<u>Particulates</u>
<u>Family</u> <u>Hydrocarbons</u>		<u>Monoxide</u>	<u>Oxides</u>	
PCT0403FZC9	0.6	0.8	4.6	0.19

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this day of October, 1992.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

Page	1

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

(Use abbreviations per SAE J1930 JUN 88)

Engine Model (Eng. Code)	Fuel Pump HFR. P/N	Injector MFR. P/N	Rated HP 2 RPM	Fuel Rate a Bated HP 3 mm /stroke	Part. Trap Catalyst MFR. P/N
3116					
(A)	4P1486 (1)	4P1735	170 a 2600	78	***
(B)	4P1486 (1)	4P1735	185 a 2600	85	
(B)	4P1486 (1)	4P1735	185 @ 2600	85	ļ ·

Revisions: 042090

(1) Basic Fuel Pump

4P1734

(Reference Page No. 16.04-0403FZC-1).

Revision No.

h:\DW4\93EPA\ARB\ARBSUP20.doc

E.O.	#	A-13-63

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

Manufacturer	Caterpillar Inc.	Engine Fam	PCTO403FZC9	·	
Liter (CID)	6.6 (403)	Fuel Type	#2 Diesel (.25% Sulfur)	Engine Config. 16	
Exhaust Emiss	ion Control Sys. and (Special	Features)	EM, SPL (TC,CAC,DI)		
(Use abbrevia	tions per SAF J1930 JUN 883		•		

Engine Model (Eng. Code)	Fuel Pump MFR. P/N	injector игг. g/м	Rated HP @ RPM	Fuel Rate @ Rated HP mm /stroke	Part. Trap, Catalyst MFR. P/N
3116					
(A)	4P1486 (1)	4P1735	1.70 a 2600	78	
(8)	4P1486 (1)	4P1735	185 2 2600	85	•••
: (B)	4P1486 (1)	4P1735	185 a 2600	85	
(C)	1014561 (1)	4P1735	170 a 2700	78	•••
					:
					ļ

Revisions: 042090

(1) Basic Fuel Pump

(Reference Page No. 16.04-0403F2C-1).

h:\DW4\93EPA\ARB\ARBSUP20.doc

2 16 NOV 93

E.O.	#	A-13-63	
			

Page	1

1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

HEAVY-DUTY DIESEL ENGINES

Manufacturer <u>Caterpillar Inc.</u> Eng				Engine Family PCT0403FZC9				
Lite	er (CID)	(403)	Fuel Type	#2 Diesel (.25	% Sulfur) Er	ngine Config.		
Exha	ust Emission Cor	ntrol Sys. and (Sp	ecial Features)	EN, SPL (TC,CA	C,D1)			
(Use	(Use abbreviations per SAE J1930 JUN 88)							
	Engine Model (Eng. Code)	Fuel Pump MFR. P/N	Injector MFR. P/N	Rated HP	Fuel Rate a Rated HP mm /stroke	Part. Trap/ Catalyst MFR. P/N		
	•							
	3116 (A)	4P1486 (1)	4P1735	170 a 2600	78			
	(B)	4P1486 (1)	4P1735	185 a 2600	85			
	(B)	4P1486 (1)	4P1735	185 2 2600	85			
٠								
		į						
					:			

Revisions: 042090

(1) Basic Fuel Pump

1018673

(Reference Page No. 16.04-0403FZC-1).

Revision No. 1 18 MAY 93

h:\DW4\93EPA\ARB\ARBSUP20.doc